FIG. 1

Browser Environment

Applet — 130

100

Browser
Frames — 110

Commercial
HTTP-Server
WML-Server
Video-Server — 502

Scripts in
different
Frames — 120

ActiveX
Embedded
Object — 140

Proprietary
XML-Server — 501

Client Application

200

HTTP-Server — 220

XML-Connections — 210

Configuration
File — 250
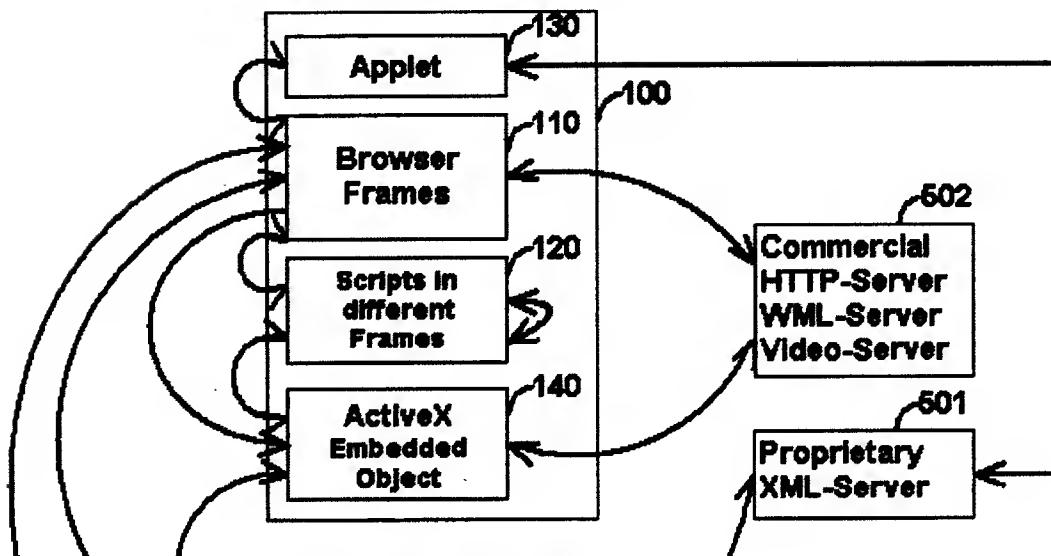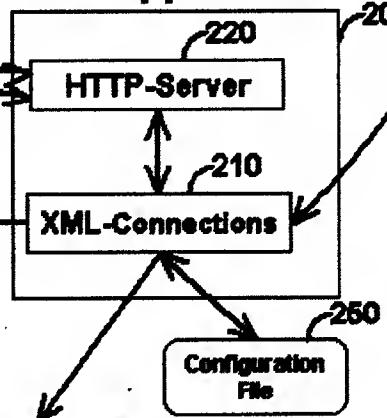
Access to all
Desktop Applications and
resources through
JNI, COM, DDE, Execute

FIG. 2

FIG. 3

Receive Content

START — 505

500

Server Integrated to the System

Get Userid — 511

Get Userid? — 516 — N → END — 521

Get Request(s) Command(s) — 550

Forward Request(s) — 560 ← → XML-Builder — 600

Continue? — 561 — N → END — 562

Receive Data — 566

Forward Command(s) — 571 →

keeps Connection Open? — 575

N

END — 580

FIG. 3A
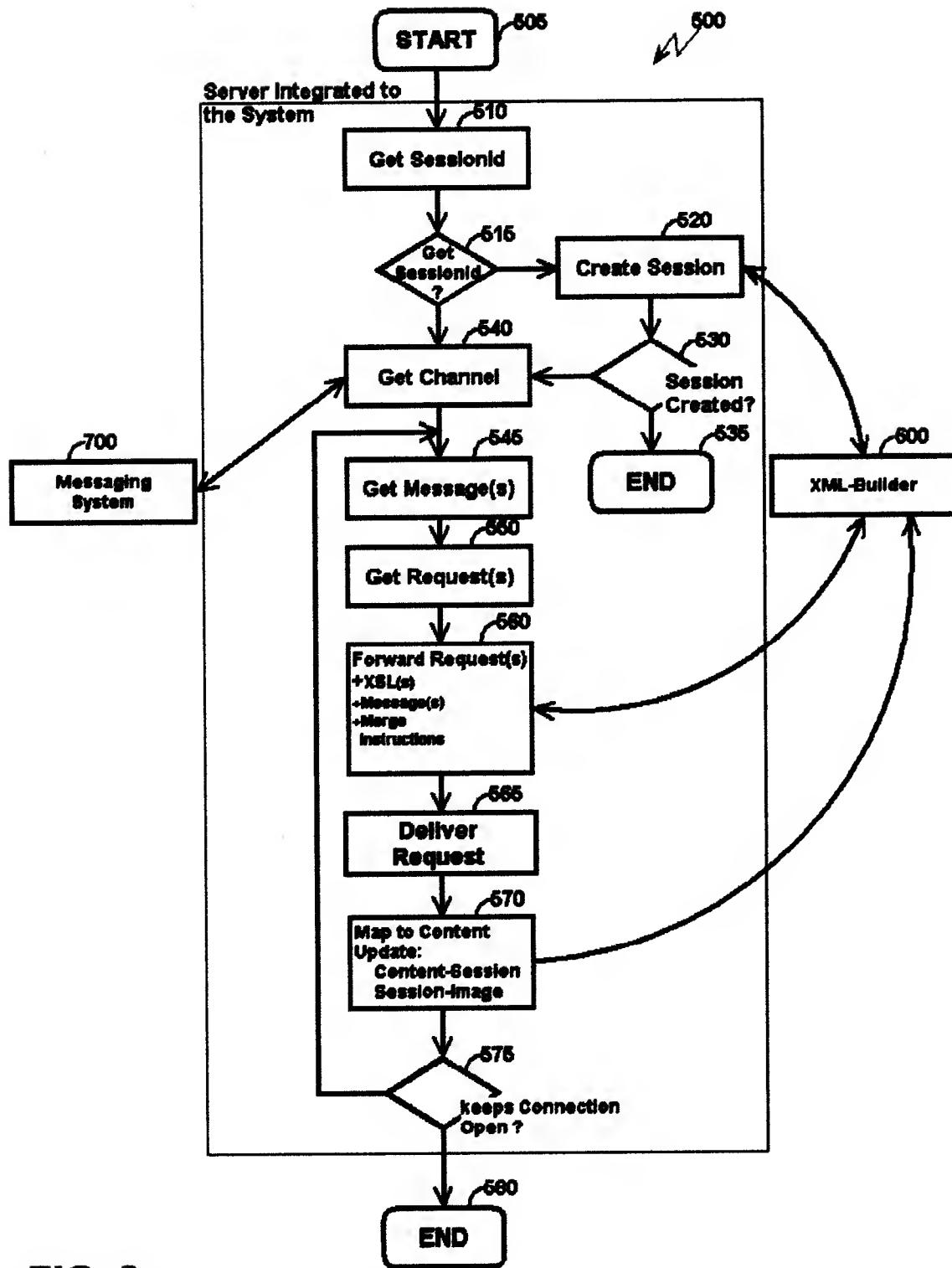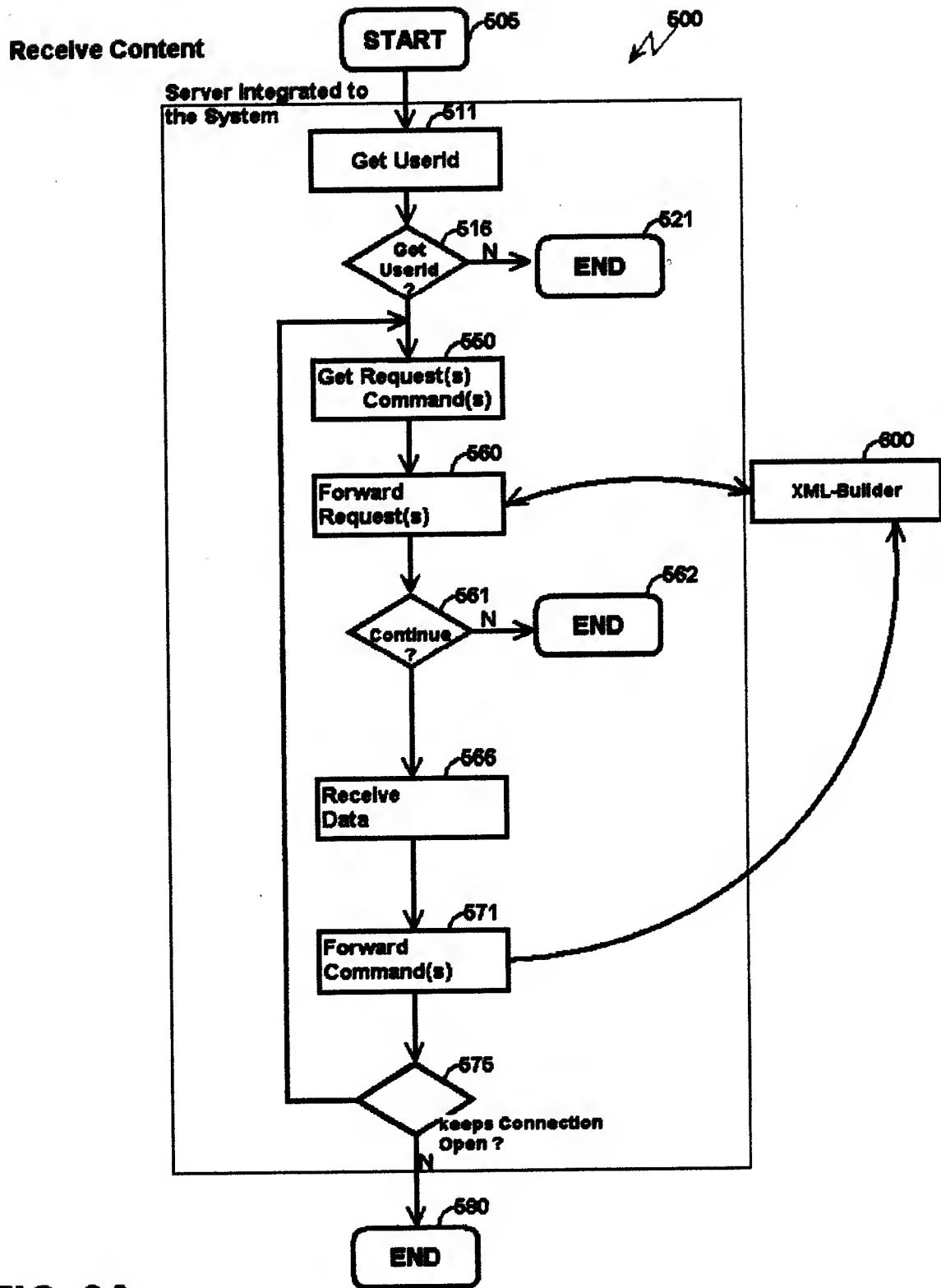
XML-Builder
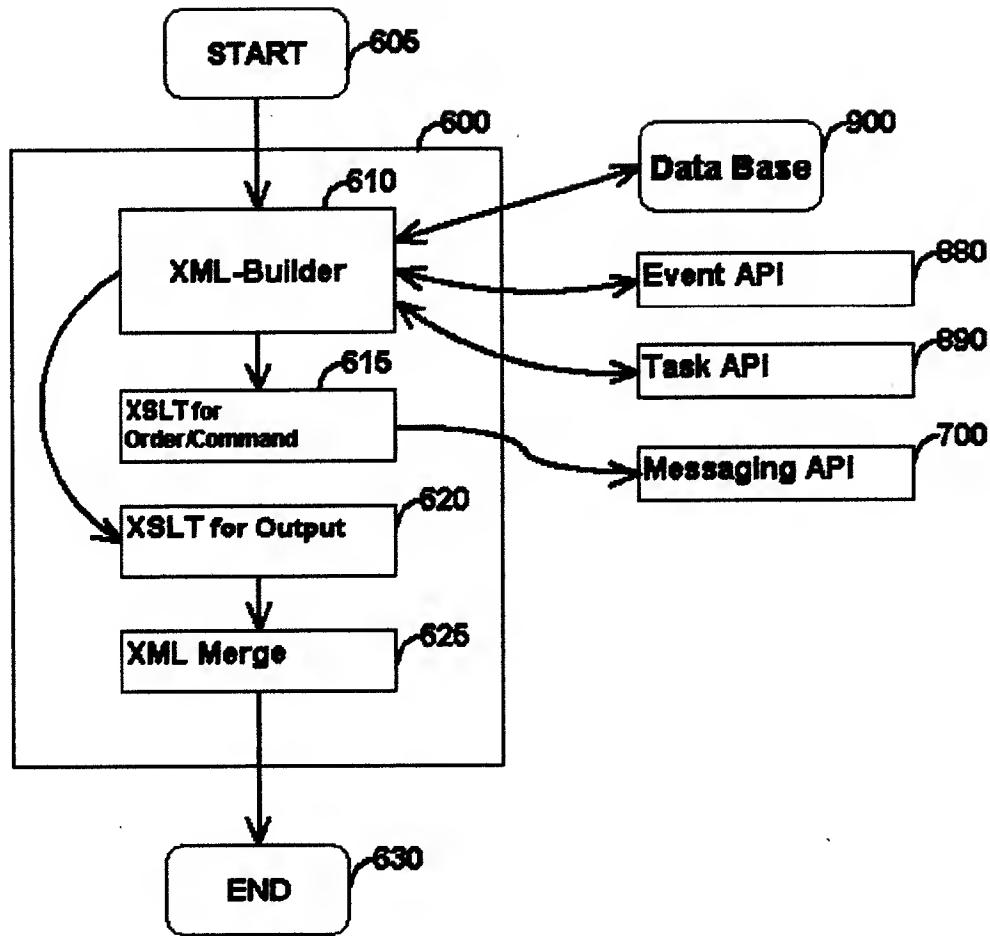
FIG. 4
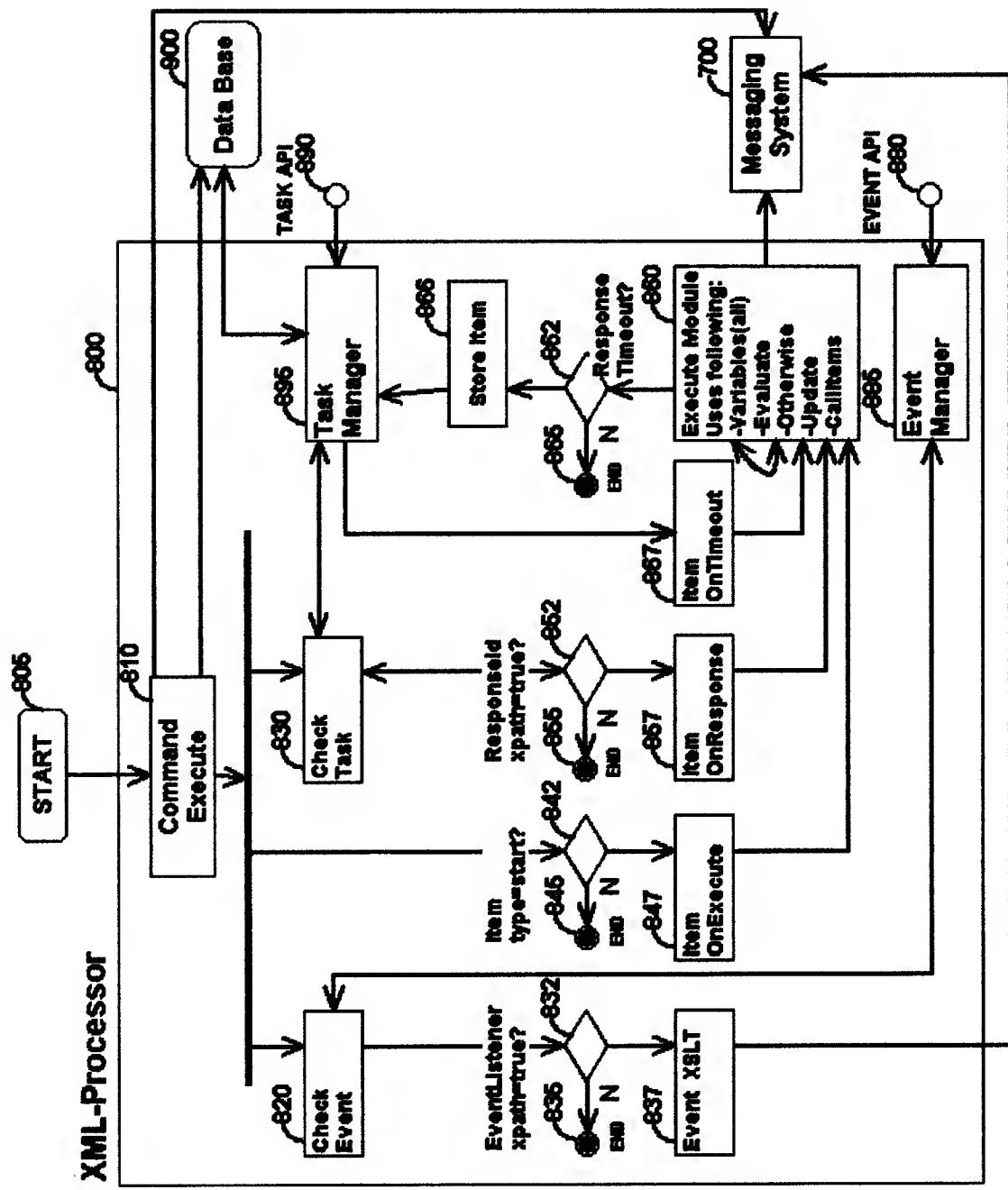
FIG. 5

```
<!ELEMENT xmlxs:InfoData (xmlxs:Command, xmlxs:Params, xmlxs:Items)>

<!ELEMENT xmlxs:Command (#PCDATA)>

<!ELEMENT xmlxs:Params (?)>

<!ELEMENT xmlxs:Items (ListItem+)>

<!ELEMENT xmlxs:ListItem (#PCDATA)>
<!ATTLIST xmlxs:ListItem
        num CDATA #REQUIRED>

<!ELEMENT xmlxs:Order (xmlxs:Item+)>
<!ATTLIST xmlxs:Order
        id CDATA #IMPLIED>

<!ELEMENT xmlxs:Item (xmlxs:Variables?, xmlxs:VariablesResponse?, xmlxs:SendTopic?, xmlxs:SendTransform?,
                xmlxs:ResponseId?, xmlxs:ResponseTimeout?, xmlxs:OnExecute?, xmlxs:OnResponse?,
                xmlxs:OnResponseTimeout?, ANY)>
<!ATTLIST xmlxs:Item
        id CDATA #REQUIRED
        type (start,?)>

<!ELEMENT xmlxs:Variables (xmlxs:var?)>

<!ELEMENT xmlxs:VariablesResponse (xmlxs:var?)>

<!ELEMENT xmlxs:var (#PCDATA)>
<!ATTLIST xmlxs:var
        name CDATA #REQUIRED
        type (int,text,nodetext,node)>

<!ELEMENT xmlxs:SendTopic (#PCDATA)>

<!ELEMENT xmlxs:SendTransform (#PCDATA)>

<!ELEMENT xmlxs:ResponseId (#PCDATA)>

<!ELEMENT xmlxs:ResponseTimeout (#PCDATA)>

<!ELEMENT xmlxs:OnExecute (((xmlxs:Evaluate?)|(Evaluate,Otherwise)?),Update?,CallItems?)>

<!ELEMENT xmlxs:OnResponse (((xmlxs:Evaluate?)|(xmlxs:Evaluate,xmlxs:Otherwise)?),
                xmlxs:Update?, xmlxs:CallItems?)>

<!ELEMENT xmlxs:OnResponseTimeout (((xmlxs:Evaluate?)|(xmlxs:Evaluate,xmlxs:Otherwise)?),
                xmlxs:Update?, xmlxs:CallItems?)>

<!ELEMENT xmlxs:Evaluate (#PCDATA,((xmlxs:Evaluate?)|(xmlxs:Evaluate,xmlxs:Otherwise)?),
                xmlxs:Update?, xmlxs:CallItems?)>
<!ATTLIST xmlxs:Evaluate
        type(lt,eq,gt);
        var CDATA #REQUIRED>

<!ELEMENT xmlxs:Otherwise (((xmlxs:Evaluate?)|(xmlxs:Evaluate,xmlxs:Otherwise)?),
                xmlxs:Update?, xmlxs:CallItems?)>

<!ELEMENT xmlxs:CallItems (#PCDATA)>

<!ELEMENT xmlxs:Update (#PCDATA)>
<!ATTLIST xmlxs:Update
        var CDATA #REQUIRED
        type (Text,NodeText,Int)>
```

FIG. 6 DTD for Orders and Commands XML

FIG. 7